

### **REMARKS**

This is a full and timely response to the non-final Office Action of October 9, 2007.

Reexamination, reconsideration, and allowance of the application and all presently pending claims are respectfully requested.

Upon entry of this First Response, claims 1-8 and 10-17 are pending in this application. Claims 1, 2, 6, 7, 10, 11, and 16 are directly amended herein. Furthermore, claim 9 is canceled, and claim 17 is newly added. It is believed that the foregoing amendments add no new matter to the present application.

### **Response to §102 and §103 Rejections**

A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. See, e.g., *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). In order for a claim to be properly rejected under 35 U.S.C. §103, the combined teachings of the prior art references must suggest all features of the claimed invention to one of ordinary skill in the art. See, e.g., *In Re Dow Chemical Co.*, 837 F.2d 469, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In re Keller*, 642 F.2d 413, 208 U.S.P.Q. 871, 881 (C.C.P.A. 1981). In addition, "(t)he PTO has the burden under section 103 to establish a *prima facie* case of obviousness." *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

## Claim 1

Claim 1 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Gale* (U.S. Patent No. 6,868,509). Claim 1 reads as follows:

1. A network router, comprising:
  - a layer 1 portion having a first communication interface and a second communication interface, said first communication interface configured to communicate with a first network over a first data path and said second communication interface configured to communicate with a second network over a second data path;
  - a layer 2 portion;
  - a layer 3 portion having a routing table specifying, for a particular destination, a data path from said layer 3 portion to said layer 2 portion, said layer 3 portion configured to provide a plurality of data packets destined for the particular destination and to route through said data path each of said data packets based on said routing table; and**
  - switching logic configured to automatically initiate a layer 2 switch such that said layer 2 portion begins to interface said data packets with said second communication interface in lieu of said first communication interface, wherein said layer 2 switch is transparent to said layer 3 portion, and wherein said layer 2 portion is configured to interface at least one of said data packets with said first communication interface prior to said layer 2 switch.** (Emphasis added).

Applicants respectfully assert that disclose at least the features of claim 1 highlighted hereinabove. Thus, the 35 U.S.C. §102 rejection of claim 1 is improper.

In this regard, it is alleged in the Office Action that:

“As per claim 1, *Gale* teaches a network router, comprising:  
a layer 1 portion having a first communication interface and a second communication interface, said first communication interface configured to communication with a first network over a first data path and said second communication interface configured to communicate with a second network over a second data path (at least col. 5:46-54; col. 7:36-63; col. 6:15-29; Fig. 3; fault router w/ 2 comm. Ports connected to network connections); a layer 3 portion having a routing table, said layer 3 portion configured to provide a plurality of data packets destined for a particular destination (at least col. 6:15-64; routing table);

a layer 2 portion configured to interface at least one of said packets with said first communication interface (at least col. 6:15-64; communication stacks); and

switching logic configured to automatically initiate a layer 2 switch such that said layer 2 portion begins to interface said data packets with said second communication interface in lieu of said first communication interface, wherein said

layer 2 switch is transparent to said layer 3 portion (at least col. 5:30-35; col. 6:15-64; fault router using networking/switch logic to route communications to non-faulted network).”

*Gale* does describe a fault router 313 that apparently switches communication between two computing devices from a faulted network to a non-faulted network. However, there is nothing in *Gale* to indicate that such a switch is “transparent to said layer 3 portion.” In fact, it appears that the routing table of the fault router 313 is updated to perform the alleged “switch.” See column 8, lines 51-53. Thus, the alleged “switch” appears to occur in layer 3, and the alleged “switch” affects the alleged “layer 3 portion” rather than being transparent to it. Accordingly, Applicants respectfully asserts that *Gale* fails to disclose, “wherein said layer 2 switch is transparent to said layer 3 portion,” as recited by claim 1.

In addition, claim 1 recites that **each** of the “plurality of data packets,” including the data packets interfaced with the “first communication interface” prior to the “layer 2 switch” and the data packets interfaced with the “second communication interface” after the “layer 2 switch,” are routed through the **same** “data path from said layer 3 portion to said layer 2 portion.” However, when the routing table of the fault router 313 in *Gale* is updated during the alleged “switch,” then presumably some of the alleged “plurality of data packets” destined for the “particular destination” would be routed through a different data path from layer 3 to layer 2, relative to others of the alleged “plurality of data packets.” In particular, the data packets routed prior to the alleged “switch” would be routed through one data path from layer 3 to layer 2, and the data packets routed after the alleged “switch” would presumably be routed through another data path from layer 3 to layer 2. Accordingly, *Gale* fails to disclose “said layer 3 portion configured to... route through said data path **each** of said data packets” and “switching logic configured to automatically initiate a layer 2 switch such that said layer 2 portion begins to interface said data packets with said second communication interface in lieu of said first communication interface... wherein said layer

2 portion is configured to interface at least one of said data packets with said first communication interface prior to said layer 2 switch,” as recited by claim 1. (Emphasis added).

For at least the above reasons, Applicants respectfully assert that *Gale* fails to disclose each feature of claim 1. Accordingly, the 35 U.S.C. §102 rejection of claim 1 should be withdrawn.

### **Claims 2-5 and 17**

Claim 4 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Gale*. In addition, claim 2 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Gale* in view of *Simpson* (U.S. Patent No. 7,234,001), and claim 3 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Gale* in view of *Singh* (U.S. Patent Publication No. 2003/0088698). Also, claim 5 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Gale* in view of *Fredette* (U.S. Patent No. 6,987,727), and claim 17 has been newly added via the amendments set forth herein. Applicants submit that the pending dependent claims 2-5 and 17 contain all features of their respective independent claim 1. Since claim 1 should be allowed, as argued hereinabove, pending dependent claims 2-5 and 17 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

## Claim 6

Claim 6 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by

Gale. Claim 6 reads as follows:

6. A network router, comprising:  
a layer 3 protocol stack configured to provide a plurality of data packets to be transmitted by said router to a particular destination, the layer 3 protocol stack having a routing table specifying, for said particular destination, a data path for routing said plurality of data packets, the layer 3 protocol stack configured to insert, into each of said plurality of data packets, route information indicative of said data path based on said routing table;  
a first layer 2 protocol stack;  
a second layer 2 protocol stack;  
a plurality of layer 3 network interfaces configured to receive data packets from said layer 3 protocol stack, wherein said layer 3 protocol stack is configured to provide each of said plurality of data packets to one of said layer 3 network interfaces; and  
***layer 2 switching logic configured to receive each of said plurality of data packets from said one layer 3 network interface, said layer 2 switching logic configured to provide at least one of said plurality of data packets to said first layer 2 protocol stack such that said at least one of said plurality of data packets is transmitted via a primary network, said layer 2 switching logic configured to perform a layer 2 switch in response to a detection of an error condition such that said layer 2 switching logic provides, in response to said detection, at least one other of said plurality of data packets to said second layer 2 protocol stack such that said at least one other of said plurality of data packets is transmitted via a secondary network, wherein said layer 2 switch is transparent to said layer 3 protocol stack.*** (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1,

Applicants respectfully assert that Gale fails to disclose at least the features of claim 6 highlighted above. Thus, the 35 U.S.C. §102 rejection of claim 6 should be withdrawn.

### Claims 7, 8, and 10

Claims 7 and 8 presently stand rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Gale*. In addition, claim 10 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Gale* in view of *Simpson*. Applicants submit that the pending dependent claims 7, 8, and 10 contain all features of their respective independent claim 6. Since claim 6 should be allowed, as argued hereinabove, pending dependent claims 7, 8, and 10 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

### Claim 11

Claim 11 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Gale*. Claim 11 reads as follows:

11. A method for use in a network router, comprising the steps of:  
***providing, from a layer 3 portion of said network router, data packets destined for a particular destination, said layer 3 portion including a routing table specifying route information for said data packets;***  
inserting said route information into each of said data packets;  
interfacing a first plurality of said data packets with a first communication interface of a layer 1 portion of said network router;  
communicating said first plurality of data packets from said first communication interface over a primary data path;  
detecting an error condition associated with said primary data path;  
***automatically performing a layer 2 switch in response to said error condition;***  
interfacing, in response to said layer 2 switch, a second plurality of said data packets with a second communication interface of said layer 1 portion; and  
communicating said second plurality of data packets from said second communication interface over a backup data path,  
***wherein said layer 2 switch is transparent to said layer 3 portion.***  
(Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicants respectfully assert that *Gale* fails to disclose at least the features of claim 11 highlighted above. Thus, the 35 U.S.C. §102 rejection of claim 11 should be withdrawn.

### Claims 12-15

Claim 12 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Gale* in view of *Simpson*. In addition, claim 13 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Gale* in view of *Singh*, and claims 14 and 15 presently stand rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Gale* in view of *Fredette*. Applicants submit that the pending dependent claims 12-15 contain all features of their respective independent claim 11. Since claim 11 should be allowed, as argued hereinabove, pending dependent claims 12-15 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

### Claim 16

Claim 16 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Gale*. Claim 16 reads as follows:

16. A method for use in a network router, comprising the steps of:  
***using a layer 3 protocol stack within said network router to provide a plurality of data packets destined for a particular destination, said layer 3 protocol stack including a routing table specifying route information for said plurality of data packets;***

inserting said route information into each of said plurality of data packets;  
transmitting said data packets from a first layer 1 communication interface over a primary data path and from a second layer 1 communication interface over a backup data path;

transmitting each of said data packets to one of a plurality of layer 3 network interfaces within said network router;

***detecting an error condition associated with said primary data path;***  
transmitting said data packets from said one layer 3 network interface to a plurality of layer 2 protocol stacks within said network router; and

***controlling which of said layer 2 protocol stacks receives each of said data packets based on said detecting step without updating said layer 3 protocol stack based on said detecting step,***

wherein each of said data packets received by a first one of said layer 2 protocol stacks is transmitted over said primary data path and each of said data packets received by a second one of said layer 2 protocol stacks is transmitted over said backup data path. (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicants respectfully assert that *Gale* fails to disclose at least the features of claim 16 highlighted above. Thus, the 35 U.S.C. §102 rejection of claim 16 should be withdrawn.


### **CONCLUSION**

Applicants respectfully request that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding Applicants' response, the Examiner is encouraged to telephone Applicants' undersigned counsel.

Respectfully submitted,

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